From	"Armstrong, Nicole (MWS)" <nicole.armstrong@gov.mb.ca></nicole.armstrong@gov.mb.ca>
Subject:	Comments on the proposed Groundwater and Water Well Act
Date:	Tue, 29 May 2012 10:14:50 AM
То:	"JamesB@manitobawildlands.org" <jamesb@manitobawildlands.org></jamesb@manitobawildlands.org>
Attachments:	Rfc822 01.dat [3 KB], Rfc822 02.dat [7 KB], Rfc822 03.dat [4 KB],
	Rfc822 04.dat [6 KB], Rfc822 05.dat [8 KB], Rfc822 06.dat [3 KB],
	Rfc822 07.dat 3 KB , Rfc822 08.dat 25 KB , Rfc822 09.dat 7 KB ,
	Rfc822 010.dat [10 KB], Rfc822 011.dat [32 KB], Rfc822 012.dat [19 KB],
	Rfc822 013.dat [9 KB], Rfc822 014.dat [10 KB], Rfc822 015.dat [44 KB],
	GROUND WATER AND WATER WELL LEGISLATION.doc [29 KB]. Rfc822
	016.dat [327 KB],

Hi James

As per our discussion, please see attached the comments received during the consultation on the proposed new Groundwater and Water Well Act along with an excel spreadsheet that tracks the comments and the disposition. Please note that the spreadsheet also includes a summary of the comments received during the two consultation meetings held with stakeholders in the water well drilling industry and the geothermal industry.

Thank you for your interest in the proposed new Groundwater and Water Well Act. Please do not hesitate to contact me if you have any questions or comments.

Nicole.

Nicole Armstrong, Director

Water Science and Management Branch

Manitoba Conservation and Water Stewardship

Suite 160, 123 Main Street

Winnipeg, MB R3C 1A5

Phone: 204-945-3991

Fax: 204-948-2357

The following are the headers for this message/rfc822 message.
 Date: Thu, 22 Mar 2012 14:33:55 -0500
 Subject: well water
 From: Claude Gagne <<u>ccgagne@gmail.com</u>>
 To: "+WPG1212 - Ground Water (MWS)" <groundwater@gov.mb.ca>

My biggest concern on well waters is contamination. When geothermal are used with a second well being the return well, that's were I have concerns. When we introduce something back into the aquifer always danger of contamination unless I am wrong. Would like some more clarification on this. Thanks Claude Gagne The following are the headers for this message/rfc822 message. Date: Thu, 22 Mar 2012 15:43:19 -0500 Subject: well water contamination From: Richard Small <<u>rbsmall2003@yahoo.com</u>> To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca></u>

Re: Comments on new, well water management practices.

Not mentioned was the monitoring of industry, including any productivity that could result in chemical or odifirous contaminates to affect the human consumption of fresh well water. Among those could be farming effluents, oil industry processing, waste disposal, and drainage systems that could be leaked into the ground aquifers. (This might also concern water that has bio-degradeable substances requiring more time in natural or other treatments.) Enforcement and stricter purification of waste water in all regions.

It would not be enough to monitor but to also enforce good practices. This, of course would require the concerned population to have all the facts and reasonings brought to their attention.

Good luck on your intended work.

Richard Small 30 St. Michael Road Winnipeg, MB R2M 2K6

<http://www.beatificjourney.net>

Re: Comments on new, well water management practices.

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Richard Small 30 St. Michael Road Winnipeg, MB R2M 2K6

<u>http://www.beatificjourney.net></u>
The following are the headers for this message/rfc822 message.
Date: Thu, 22 Mar 2012 16:29:54 -0500
Subject: groundwater
From: Debbie Watt <<u>debbwatt@gmail.com</u>>
To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Having lived on a farm that had the best water, and see it become undrinkable, I am all for whatever needs to be done to save our groundwater from contamination. To keep it drinkable for the coming generations. Thank you, Debbie Watt

Having lived on a farm that had the best water, and see it become undrinkable, I am all for whatever needs to be done to save our groundwater from contamination. To keep it drinkable for the coming generations. Thank you, Debbie Watt

The following are the headers for this message/rfc822 message.

Date: Mon. 26 Mar 2012 13:14:51 -0500

Subject: Discussion with Dennis Antony, Winnipeg Environmental

From: "Betcher, Bob (MWS)" <<u>Bob.Betcher@gov.mb.ca</u>>

To: "+WPG1212 - Ground Water (MWS)" <groundwater@gov.mb.ca>

Had a phone call from Dennis Antony with Winnipeg Environmental regarding the new Act. He drills wells for petroleum clean-up sites. In most cases the wells do not go to the water table and are used to vent hydrocarbon gasses. In some instances he may put in shallow groundwater monitoring wells at these sites. He wanted to know how we would treat licencing his company to do this type of work and certification requirements. I indicated that shallow venting wells would not be defined as wells under the current or new Act and so would not be covered. However, if he did wish to install shallow groundwater monitoring wells the firm would need to be licenced and the driller or supervisor would need to be certified. I did indicate that we would consider lesser requirements to certify a driller to do only these types of wells and would put restrictions on the certification to indicate that only very specific types of monitoring wells could be drilled. In other words, I indicated we would likely build in some considerable flexibility into the certification process.

R. N. Betcher, Manager
Groundwater Management Section
Manitoba Conservation and Water Stewardship
200 Saulteaux Cresc.
Winnipeg, Manitoba R3J 3W3
(204) 945-7420 (phone)
(204) 945-7419 (fax)

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R. N. Betcher, Manager Groundwater Management Section Manitoba Conservation and Water Stewardship 200 Saulteaux Cresc. Winnipeg, Manitoba R3J 3W3 (204) 945-7420 (phone) (204) 945-7419 (fax)

The following are the headers for this message/rfc822 message.Date: Wed, 28 Mar 2012 16:11:14 -0500

Subject: APEGM Phone Call From: "Betcher, Bob (MWS)" <<u>Bob.Betcher@gov.mb.ca</u>> To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Received a phone call from Grant Koropatnick, P.Eng. from the APEGM. He said the Association had received the letter regarding the new Act and just wanted to let me know that they will be sending an e-mail to all their members referring them to the web site and that they can provide individual comments to us. I told him we had received comments a couple of years ago from their legislative committee and he indicated that he will also refer this to that committee. I also said that a draft of the new Act is available on request and Grant indicated that he would include that in the e-mail to the membership.

R. N. Betcher, Manager

Groundwater Management Section

Manitoba Conservation and Water Stewardship

200 Saulteaux Cresc.

Winnipeg, Manitoba R3J 3W3

(204) 945-7420 (phone)

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R. N. Betcher, Manager

Groundwater Management Section

Manitoba Conservation and Water Stewardship

200 Saulteaux Cresc.

Winnipeg, Manitoba R3J 3W3

(204) 945-7420 (phone)

(204) 945-7419 (fax)

The following are the headers for this message/rfc822 message.
 Date: Fri, 30 Mar 2012 09:35:25 -0500
 Subject:
 From: "2047406049@vmobile.ca" <2047406049@vmobile.ca>
 To: "+WPG1212 - Ground Water (MWS)" <groundwater@gov.mb.ca>

Re: new groundwater/well leg. Kudos for wanting safe water! But will we be = forced to poison this H2O with flouride? TY

You can contact me at 2047406049 Vous pouvez me joindre au 2047406049.

Sent by Text Messaging from a mobile device. Envoye par messagerie texte d'un appareil mobile.

The following are the headers for this message/rfc822 message.

Date: Fri, 30 Mar 2012 09:48:47 -0500 Subject:

From: "2047406049@vmobile.ca" <2047406049@vmobile.ca> To: "+WPG1212 - Ground Water (MWS)" <groundwater@gov.mb.ca>

Thank you. Do you know which department I urgently need to inform regarding= TRUTH about the waste byproduct, flouride?

You can contact me at 2047406049 Vous pouvez me joindre au 2047406049.

Sent by Text Messaging from a mobile device. Envoye par messagerie texte d'un appareil mobile.

The following are the headers for this message/rfc822 message.
 Date: Fri, 30 Mar 2012 10:10:02 -0500
 Subject:
 From: "Dalman, Aprille (TPR)"
 To: "+WPG1212 - Ground Water (MWS)" <groundwater@gov.mb.ca>

Also take into consideration existing or new gravel pits and that they follow all guidelines

The following are the headers for this message/rfc822 message.
 Date: Tue, 3 Apr 2012 12:11:53 -0500
 Subject: Ray Bodnaruk and Comments on the Draft Act
 From: "Betcher, Bob (MWS)" <<u>Bob.Betcher@gov.mb.ca</u>>
 To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Ray Bodnaruk called today. He initially asked for a print out of the draft Act (paper copy) then got into a long discussion of the past and the present. His main points were that Aquifer Management Plans likely should reside in the Water Protection Act (a good point actually) but he was also concerned that the interface between this draft Act and other existing Acts could be looked at more closely. He will provide comments back in this regard and may also send his comments to others.

R. N. Betcher, Manager

Groundwater Management Section

Manitoba Conservation and Water Stewardship

200 Saulteaux Cresc.

Winnipeg, Manitoba R3J 3W3

(204) 945-7420 (phone)

(204) 945-7419 (fax)

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Groundwater Management Section

Manitoba Conservation and Water Stewardship

200 Saulteaux Cresc.

Winnipeg, Manitoba R3J 3W3

(204) 945-7420 (phone)

(204) 945-7419 (fax)

The following are the headers for this message/rfc822 message.
 Date: Tue, 10 Apr 2012 15:58:18 -0500
 Subject: Review of Proposed New Groundwater and Water Well Act Discussion
 From: "Lemoine, Rick" <<u>rlemoine@suncor.com</u>>
 To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Hi Bob,

Long time.

I have reviewed the brief Discussion Paper.

Will there be another opportunity for stakeholder review of the actual draft revisions to the new Act prior to anything being finalized?

In general, I am in agreement with the proposed actions as cited in the Discussion Paper. I have a few questions:

* What is the proposed definition for "geotechnical hole"? Would this be something along the lines of a slope stability monitoring well or could it include shallower soil/sediment installations such as typical shallow (ie. maximum 20 to 25 feet) soil/sediment characterization test holes (often completed with PVC pizometers installed) used for foundation design, environmental site investigations, etc?

* For sealing of geotechnical holes or monitoring wells, would technicians in the field require personal certification, or could they be acting in the field under direct supervision of a certified person, much like the present situation of a non-certified field technician working under the direct supervision of a certified P. Geo or P. Eng.?

* I assume that reporting for dilling of geotechnical holes will be done by the driller's report submission

and not by the submission of any subsequent written engineer's or hydrogeologist's report, which would be the confidential property of the client?

Thanks Bob,

Rick

Rick M. Lemoine, M.Sc., P.Geo. Senior Advisor - Site Remediation/Asset Management Suncor Energy Products Partnership Tel 204 989 4468 Cell 204 782 9019 Fax 204 633 5149 rlemoine@suncor.com<mailto:rlemoine@suncor.com>

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Rick M. Lemoine, M.Sc., P.Geo.

Senior Advisor - Site Remediation/Asset Management Suncor Energy Products Partnership Tel 204 989 4468 Cell 204 782 9019 Fax 204 633 5149 rlemoine@suncor.com

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Subject: RE: Review of Proposed New Groundwater and Water Well Act **From:** "Lemoine, Rick" <<u>rlemoine@suncor.com</u>> **To:** "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca></u>

Hi Bob,

The Comprehensive Documetn served to answer my first few questions.

Here are some more:

*

When a P.Geo or P.Eng is logging a geotechnical well or test hole that does not encounter an aquifer (ie. terminates at a depth within overburden or only intersects non-aquifer groundwater in the overburden such as perched water in silt at a 2 meter depth within Winnipeg), do the logs still need to be reported to the Director?

*

Regarding contaminated wells - in the case of an investigation where the scope of work is at a known/highly suspected site of contaminated groundwater (ex. environmental site assessments) are the notifications to the Director and work stoppage and authorization items applicable?

*

Section 50(3) - does a P. Geo or P.Eng doing the logging have to supply the Contractor/Driller with logs or a formal witten report?

Thanks

Rick

Rick M. Lemoine, M.Sc., P.Geo. Senior Advisor - Site Remediation/Asset Management Suncor Energy Products Partnership Tel 204 989 4468 Cell 204 782 9019 Fax 204 633 5149 rlemoine@suncor.com<mailto:rlemoine@suncor.com>

From: +WPG1212 - Ground Water (MWS) [mailto:groundwater@gov.mb.ca]

Sent: Tuesday, April 10, 2012 4:14 PM To: Lemoine, Rick Subject: RE: Review of Proposed New Groundwater and Water Well Act Discussion Paper

Hi Rick

Here is the full draft version of the Act which you are welcome to review. I think this may answer most of your questions but if not just let me know and I'll try to give you a response. There is a section in there that says if the driller is working under the supervision of a geologist or engineer then it's the geologist/engineer's job to submit the log. This was inserted because we found drillers were not submitting logs for these jobs (they didn't do the logging of the hole, etc) and we don't get copies of most engineering reports that would contain the well logs. So these holes were not getting into our system.

Bob

R. N. Betcher, Manager

Groundwater Management Section

Manitoba Conservation and Water Stewardship

200 Saulteaux Cresc.

Winnipeg, Manitoba R3J 3W3

(204) 945-7420 (phone)

(204) 945-7419 (fax)

From: Lemoine, Rick [mailto:<u>rlemoine@suncor.com]</u> Sent: April-10-12 3:58 PM To: +WPG1212 - Ground Water (MWS) Subject: Review of Proposed New Groundwater and Water Well Act Discussion Paper

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Long time.

I have reviewed the brief Discussion Paper.

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Rick

Rick M. Lemoine, M.Sc., P.Geo.

Senior Advisor - Site Remediation/Asset Management

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Tel 204 989 4468

Cell 204 782 9019

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Senior Advisor - Site Remediation/Asset Management Suncor Energy Products Partnership Tel 204 989 4468 Cell 204 782 9019 Fax 204 633 5149 rlemoine@suncor.com

From: +WPG1212 - Ground Water (MWS) [mailto:groundwater@gov.mb.ca]
Sent: Tuesday, April 10, 2012 4:14 PM
To: Lemoine, Rick
Subject: RE: Review of Proposed New Groundwater and Water Well Act Discussion Paper

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R. N. Betcher, Manager

Groundwater Management Section

Manitoba Conservation and Water Stewardship

200 Saulteaux Cresc.

Winnipeg, Manitoba R3J 3W3

(204) 945-7420 (phone)

(204) 945-7419 (fax)

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To: +WPG1212 - Ground Water (MWS)
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Rick M. Lemoine, M.Sc., P.Geo.

Senior Advisor - Site Remediation/Asset Management

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Subject: New Groundwater and Water Well Act From: Jason McFarlane <<u>jason_mcfarlane@transcanada.com</u>> To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Hello:

Having gone through the implementation of similar regulations in Ontario, I would kindly suggest that more detail be provided around the classification/description of "monitoring" wells. There seemed to be quite a bit of confusion when it came to monitoring wells or boreholes that were installed as part of an environmental soil/groundwater assessment where contamination was expected. It seemed that the legislation in Ontario was written with a significant focus on the installation of drinking water wells. Using that approach caused many grey areas that could not be easily interpreted by drillers/environmental consultants. This seemed to cause both to err on the side of conservatism which greatly increased the cost of monitoring well/borehole installation.

In my opinion, there should be a separate section specifically dedicated to environmental soil and groundwater assessments/remediations and to the wells/boreholes that are installed during that work. It would also be helpful to see specifics on decommissioning these types of wells.

Thanks,

"Safe Workers Aren't Born, They're Trained"

Jason McFarlane, P.Geo.

Environmental Project Manager

Central Region

Phone:(204) 957-6804

Cell: (204) 918-5425

Fax: (204) 957-5146

104 Terracon Place

Winnipeg, MB, R2J 4G7

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Date: Tue, 17 Apr 2012 09:48:41 -0500 Subject: Conversation with Lewis Hopper From: "Betcher, Bob (MWS)" <<u>Bob.Betcher@gov.mb.ca</u>> To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Lewis Hopper called today. He had a couple of questions on the new Act. He wanted to know if he needed to get certified as a well driller to do rehabilitation work on wells. He no longer drills wells himself but does consult to do things such as acidizing wells, iron bacteria control, etc. Generally he would hire a licenced driller to do the work but not in all cases. I replied that this type of work would probably not be considered to be well construction under the Act but we had not really considered it in our drafting so far. It is a good point and something that should be considered in the Act and subsequent regulations. If we decide he needs to be certified then that opens a can of worms about having to include well rehabilitation in our regulations. He would also need to be licenced if we require certification.

He was also concerned about how he could be certified as a well sealer and when he would have to be certified. I told him that after the Act is passed it will not come into force for likely a year or more and even after that there would be a grandfathering clause to give experienced people perhaps a couple of years to become certified.

R. N. Betcher, Manager

Groundwater Management Section

Manitoba Conservation and Water Stewardship

200 Saulteaux Cresc.

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(204) 945-7420 (phone)

(204) 945-7419 (fax)

Lewis Hopper called today. He had a couple of questions on the new Act. He wanted to know if he needed to get certified as a well driller to do rehabilitation work on wells. He no longer drills wells himself but does consult to do things such as acidizing wells, iron bacteria control, etc. Generally he would hire a licenced driller to do the work but not in all cases. I replied that this type of work would probably not be considered to be well construction under the Act but we had not really considered it in our drafting so far. It is a good point and something that should be considered in the Act and subsequent regulations. If we decide he needs to be certified then that opens a can of worms about having to include well rehabilitation in our regulations. He would also need to be licenced if we require certification.

He was also concerned about how he could be certified as a well sealer and when he would have to be certified. I told him that after the Act is passed it will not come into force for likely a year or more and even after that there would be a grandfathering clause to give experienced people perhaps a couple of years to become certified.

R. N. Betcher, Manager

Groundwater Management Section

Manitoba Conservation and Water Stewardship

200 Saulteaux Cresc.

Winnipeg, Manitoba R3J 3W3

(204) 945-7420 (phone)

(204) 945-7419 (fax)

The following are the headers for this message/rfc822 message.
 Date: Tue, 17 Apr 2012 11:50:02 -0500
 Subject: Proposed New Groundwater and Water Well Act
 From: "Tataryn, Peter" <<u>ptataryn@smithcarter.com</u>>
 To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Hi Robert,

First of all, thank you for inviting APEGM members to comment on this proposed legislation.

I have one comment regarding the proposed new Groundwater and Water Well Act: with the increased licensing and certifications that this Act will add, I hope that the processes during the exploration, development, and construction phases of wells for both open and closed-loop geothermal systems will not substantially increase and thus jeopardize project schedules and budgets. Typically during these phases, time is of the essence, especially during exploration and development when the feasibility of geothermal systems is decided as a "go or no go". It seems that project schedules lately have been getting tighter and not providing any room for contingency. Will there be anything like staff additions to take care of this additional work that the Province will require to process these new regulations?

Regards, Peter D. Tataryn, M.Sc., P.Eng. Mechanical Engineer Smith Carter Architects and Engineers Inc. 1600 Buffalo Place Winnipeg, MB R3T 6B8 Tel: (204) 477-1260, ext. 285 Fax: (204) 477-6346 ptataryn@smithcarter.com<blocked::mailto:ptataryn@smithcarter.com> http://www.smithcarter.com<blocked::http://www.smithcarter.com/>

Project No.

Hi Robert,

First of all, thank you for inviting APEGM members to comment on this proposed legislation.

I have one comment regarding the proposed new Groundwater and Water Well Act: with the increased licensing and certifications that this Act will add, I hope that the processes during the exploration, development, and construction phases of wells for both open and closed-loop geothermal systems will not substantially increase and thus jeopardize project schedules and budgets. Typically during these phases, time is of the essence, especially during exploration and development when the feasibility of geothermal systems is decided as a "go or no go". It seems that project schedules lately have been getting tighter and not providing any room for contingency. Will there be anything like staff additions to take care of this additional work that the Province will require to process these new regulations?

Regards, Peter D. Tataryn, M.Sc., P.Eng. Mechanical Engineer Smith Carter Architects and Engineers Inc. 1600 Buffalo Place Winnipeg, MB R3T 6B8 Tel: (204) 477-1260, ext. 285 Fax: (204) 477-6346 ptataryn@smithcarter.com www.smithcarter.com

Project No.

The following are the headers for this message/rfc822 message.
 Date: Thu, 19 Apr 2012 07:29:42 -0500
 Subject: Submission ...
 From: Ted Ross < ted.david.ross@gmail.com>

To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

... re Consultations on New Groundwater and Well Water Legislation. Attached. The following are the headers for this message/rfc822 message. Date: Thu, 19 Apr 2012 14:45:21 -0500 Subject: Re: Proposed Groundwater Legislation From: Anandakumar Palanichamy <<u>anandakumarp@gmail.com</u>> To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Dear Manager,

Please find attached the discussion paper with my comments in one place. Apart from this,

Following are my comments with regard to Groundwater Management and Protection:

The pumping out of groundwater from the wells should be limited to their regeneration capacity.

Regeneration capacity depends on various groundwater recharging factors with regard to the particular zone or well. Regeneration capacity is defined not only on quantity terms but could also be on quality terms.

The regulation should have an hydrogeological estimate of maximum lowest level of ground water that could be touched upon due to pumping out of water in a well. Or there must be an indication of maximum quantity of water to be pumped out in a well in a particular zone depending on the season or year that has either surplus or deficit of groundwater due to flood or drought on the surface.

Over loaded wells may be mandated of having rain water harvesting and storage structures near those wells.

The above mandates would ensure the sustainable use of groundwater

for generations; ensure better farming activities; and prevent the global warming above and below the surface.

I hope those comments are helpful.

Regards Anandakumar Palanichamy M.Sc., P.Eng.

On Mon, Apr 2, 2012 at 3:00 PM, +WPG1212 - Ground Water (MWS) <<u>groundwater@gov.mb.ca</u>> wrote:

Greetings. Here is an electronic version of the draft legislation.

R. N. Betcher, Manager

Groundwater Management Section

Manitoba Conservation and Water Stewardship

200 Saulteaux Cresc.

Winnipeg, Manitoba R3J 3W3

(204) 945-7420 (phone)

(204) 945-7419 (fax)

From: Anandakumar Palanichamy [mailto:<u>anandakumarp@gmail.com]</u> Sent: April-02-12 7:21 AM To: +WPG1212 - Ground Water (MWS) Subject: Re: Proposed Groundwater Legislation

Please send me the copy of proposed Groundwater Legislation to

Anandakumar Palanichamy, M.Sc., P.Eng.,

306 - 400 Kennedy St

Winnipeg, MB R3B 2N1

On Fri, Mar 30, 2012 at 12:19 PM, APEGM <<u>eapegm@apegm.mb.ca</u>> wrote:



Proposed Groundwater Legislation

Dear APEGM Member,

You are invited to provide comment on the proposed new *Groundwater and Water Well Act of Manitoba*. Please see the discussion paper from Manitoba Conservation and Water <u>Stewardship</u>.

NOTE: You can request a copy of the DRAFT legislation by emailing groundwater@gov.mb.ca

For any member practicing in this area, please provide your comments to the contact person listed at the end of the discussion paper by April 20, 2012.

Thanks in advance for your participation.

Yours truly,

Grant Koropatnick, PEng

Executive Director & Registrar

Please do not reply to this email as it is used exclusively for distribution of APEGM notices.

We will be happy to respond to your questions at: apegm@apegm.mb.ca .

If you would like to be removed from this list, please contact APEGM at <u>removeme@apegm.mb.ca</u>.

Registered professional engineers and geoscientists are rigorously educated, experienced and committed to a Code of Ethics that puts the public interest first, and can be identified by the "P.Eng." or "P.Geo." behind their names.

Association of Professional Engineers and Geoscientists of the Province of Manitoba 870 Pembina Highway, Winnipeg, MB Canada R3M 2M7

The following are the headers for this message/rfc822 message.
 Date: Thu, 19 Apr 2012 15:48:50 -0500
 Subject: FW: Proposed New Groundwater and Water Well Act
 From: "Vandersteen, Denton" <<u>dmtvandersteen@hydro.mb.ca</u>>
 To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Dear Mr. Betcher

Manitoba Hydro enthusiastically supports your efforts to strengthen the existing

legislation. We agree that it is very important to include geothermal, geotechnical and monitoring wells in the Act. We also recommend that the data base include basic information on all types of open and closed loop geothermal ground loop heat exchangers including horizontal and vertical bore. Ground loop information that should be considered for tracking could include:

- * GPS location of the loop field (ground heat exchanger)
- * Loop type description i.e. horizontal bore, vertical bore, slinky etc.
- * Type of antifreeze solution
- * Number of boreholes, borehole spacing and grid pattern
- * A site plan of the ground heat exchanger location as required by CSA C448 Design
- and Installation of Earth Energy Systems
- * Ground/ drilling conditions

Thank you very much for undertaking this initiative to protect the environment for all Manitobans. If we can be of any further assistance with this initiative please advise.

Sincerely,

Denton Vandersteen, P. Eng. Senior Commercial Systems Engineer Customer Engineering Services Manitoba Hydro 360 Portage Ave. P.O. Box 815 Stn Main Winnipeg, Manitoba R3C 2P4 PH: (204) 360-3803 Fax: (204) 360 6109

Dear Mr. Betcher

Manitoba Hydro enthusiastically supports your efforts to strengthen the existing legislation. We agree that it is very important to include geothermal, geotechnical and monitoring wells in the Act. We also recommend that the data base include basic information on all types of open and closed loop geothermal ground loop heat exchangers including horizontal and vertical bore. Ground loop information that should be considered for tracking could include:

- GPS location of the loop field (ground heat exchanger)
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- Number of boreholes, borehole spacing and grid pattern
- A site plan of the ground heat exchanger location as required by CSA C448 Design and Installation of Earth Energy Systems
- Ground/ drilling conditions

Thank you very much for undertaking this initiative to protect the environment for all Manitobans. If we can be of any further assistance with this initiative please advise.

Sincerely,

Denton Vandersteen, P. Eng. Senior Commercial Systems Engineer Customer Engineering Services Manitoba Hydro 360 Portage Ave. P.O. Box 815 Stn Main Winnipeg, Manitoba R3C 2P4 PH: (204) 360-3803 Fax: (204) 360 6109

The following are the headers for this message/rfc822 message.
 Date: Thu, 19 Apr 2012 16:26:48 -0500
 Subject: MGEA Industry Statement on proposed changes to Act
 From: Inez Miller <<u>inez@mgea.ca</u>>
 To: "Betcher, Bob (MWS)" <<u>Bob.Betcher@gov.mb.ca</u>>

Bob, attached is the MGEA position statement on proposed amendments to the Act. Please do not hesitate to have staff call if they have questions.

On another note, tomorrow is your last day of work. On behalf of the MGEA Board of Directors, we wish you the very best in your new career. Manitoba will miss you!

Inez Miller

Manitoba Geothermal Energy Alliance Inc (MGEA)

Phone: 204 334 5194

Fax: 203 334 5239

1082 Main Street

Winnipeg, Mb R2W 5J3

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The following are the headers for this message/rfc822 message.
 Date: Fri, 20 Apr 2012 11:09:12 -0500
 Subject: groundwater consultations
 From: Anika Terton <<u>ani@climatechangeconnection.org</u>>
 To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Dear Mr. Betcher

The Manitoba Eco-Network Water Caucus is pleased to provide input into Manitoba Conservation and Water Stewardship's new Groundwater and Water Well Act. Please find attached our written submission to the Water Science and Management Branch.

Sincerely,

Anika Terton

Anika Terton

Public Education and Outreach Coordinator

Climate Change Connection

3rd Floor, 303 Portage Avenue

Winnipeg, Manitoba

Phone: (204) 943-4836

Email: ani@climatechangeconnection.org

Climate Change Connection - Hompage

'Like' us on Facebook

<u>@ClimateManitoba</u>

① The following are the headers for this message/rfc822 message.

 Date: Fri, 20 Apr 2012 13:58:52 -0500

 Subject: Discussion Paper: Proposed New Groundwater and Water Well Act

 From: "Desgroseilliers, Allyson S" <<u>a.desgroseilliers@amec.com</u>>

 To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Attached please find our comments for your consideration.

Thank you.

Allyson Desgroseilliers, P.Eng., B.Sc. (Bio)

Unit Manager Winnipeg Operations

Senior Environmental Engineer

AMEC

Winnipeg/Environment and Infrastructure

440 Dovercourt Drive, Wpg, MB R3Y 1N4

Tel 204-488-2997 x 3033, (fax 204-489-8261)

Direct 204-594-3033, mobile/cell 204-793-8997

a.desgroseilliers@amec.com

amec.com

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The following are the headers for this message/rfc822 message.
 Date: Fri, 20 Apr 2012 15:23:24 -0500
 Subject: KAP Letter Re Proposed New Groundwater and Water Well Act From: James Battershill <<u>Policy@kap.mb.ca</u>>
 To: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>>

Hello,

Please see the attached document for KAP's comments on the discussion paper circulated by Manitoba Conservation and Water Stewardship on changes to well and groundwater legislation.

James Battershill Policy Analyst Keystone Agricultural Producers policy@kap.mb.ca phone: (204) 697-1140

The following are the headers for this message/rfc822 message.

Date: Fri, 20 Apr 2012 16:18:45 -0500 Subject: Proposed amendments to the Groundwater and Water Well Act From: Inez Miller <<u>inez@mgea.ca</u>> To: "Betcher, Bob (MWS)" <<u>Bob.Betcher@gov.mb.ca</u>>

MWWA would like to thank you for the opportunity to participate in consultations toward the Groundwater and Water Well Act.

We heard from MWWA members throughout the Province about proposed changes. Their recommendations are included in the MWWA statement.

Please do not hesitate to contact me or Jeff Bell, President of MWWA if we can be of further assistance in responding to questions about the proposed legislation or in development of the regulations.

Thank you

Inez Miller

Manitoba Geothermal Energy Alliance Inc (MGEA)

Phone: 204 334 5194

Fax: 203 334 5239

1082 Main Street

Winnipeg, Mb R2W 5J3

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The following are the headers for this message/rfc822 message.Date: Sun, 22 Apr 2012 21:11:04 -0500

Subject: New Groundwater and Water Well Act submission From: "dcspeer@mymts.net" <dcspeer@mymts.net> To: "+WPG1212 - Ground Water (MWS)" <groundwater@gov.mb.ca>

Hello Mr. Betcher;

As we discussed, here follows our submission for inclusion in your reworking of the Groundwater/Water Well Act.

Regards,

Darryl The following are the headers for this message/rfc822 message. Date: Thu, 26 Apr 2012 12:44:51 -0500 Subject: FW: Comments re new Groundwater and Water Well Act From: "+WPG1212 - Ground Water (MWS)" <<u>groundwater@gov.mb.ca</u>> To: "Armstrong, Nicole (MWS)" <<u>Nicole.Armstrong@gov.mb.ca</u>>

FYI

From: Lindsay Thomson [mailto:<u>lthomson@amm.mb.ca</u>]
Sent: April-26-12 9:36 AM
To: +WPG1212 - Ground Water (MWS)
Subject: Comments re new Groundwater and Water Well Act

Good morning,

Please see the attached comments from the Association of Manitoba Municipalities regarding the new groundwater and water well legislation. A paper copy has also been sent.

Thank you.

Lindsay Thomson

Senior Policy Analyst

Tel: 204-856-2371

Fax: 204-856-2370

There is a big image in the attachments: Water submission map.jpg, size: [989 KB]. Please choose an action: Open scaled image preview. Open non-scaled image preview.